

LAND APPLICATION SITE

MARK L PALMER SITE

LUMLP 1-12

LUNENBURG COUNTY

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 8-2-13 between MARK L. PALMER referred to here as "Landowner", and Recyc Systems, Inc., referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in LUXEBURG CO. Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
<u>TM280P41</u>			
<u>TM280P41A</u>			
<u>TM280P42</u>			
<u>TM280P43</u>			
<u>TM400P2</u>			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one: ☐ The Landowner is the sole owner of the properties identified herein.
☒ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

MARK L. PALMER OWNER Mark L. Palmer BRAXTON RD. 2205 DRAKES BRANCH VA
 Landowner - Printed Name, Title Signature Mailing Address & Phone Number 23937
(434) 568-0248

Permittee:

Recyc Systems, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

[Signature] PO Box 562 Remington, Virginia 22734
 Permittee - Authorized Representative Signature Mailing Address
 Printed Name

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Recyc Systems, Inc.

County or City: LUNEBURG Co.

Landowner: MARK L. PALMER

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols.
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil.
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids.
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (50 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days.
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days.
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Mark L. Palmer
Landowner's Signature

7-16-13
Date

Farm Operator Signature

Mailing Address & Phone Number

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 8-2-13 between Francis R. Palmer referred to here as "Landowner", and Recvc Systems, Inc, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in LUNEBURG CO, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
<u>TM409) P1</u>			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one: ☒ The Landowner is the sole owner of the properties identified herein.
☐ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

FRANCIS R. PALMER Landowner JR Palmer
 Landowner - Printed Name Title Signature

2500 KINTFORD RD
MIDDLETON, VA 22313
 Mailing Address & Phone Number
804-794-6840

Permittee:

Recvc Systems, Inc, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

[Signature]
 Permittee - Authorized Representative
 Printed Name

Signature

PO Box 562 Remington, Virginia 22734

Mailing Address

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Recyc Systems, Inc

County or City: LUNEBURG CO.

Landowner: FRANCIS R. PALMER

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols.
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil.
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days:
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Francis R. Palmer
Landowner's Signature

7/16/13
Date

Farm Operator Signature

Mailing Address & Phone Number

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 8-2-13 between SUE W. PALMER referred to here as "Landowner", and Recyc Systems, Inc. referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in LANEBURG, VA Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
<u>TM 280 P 41A</u>			
<u>TM 280 P 42</u>			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

- ☐ The Landowner is the sole owner of the properties identified herein.
☒ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

<u>Sue W. Palmer, Owner</u>	<u>Sue W. Palmer</u>	<u>2973 Braxton Rd. Drakes Branch</u>
Landowner - Printed Name, Title	Signature	Mailing Address & Phone Number
		<u>VA 23937</u>

(434) 547-0046

Permittee:

Recyc Systems, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

<u>[Signature]</u>	<u>PO Box 562 Remington, Virginia 22734</u>
Permittee - Authorized Representative	Mailing Address
Printed Name	Signature

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Recyc Systems, Inc

County or City: LUDENBURG CO.

Landowner: SUE W. PALMER

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
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 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
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 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Sue W. Palmer
Landowner's Signature

7/10/10.
Date

Farm Operator Signature

Mailing Address & Phone Number

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Landowner Coordination Form

This form is used by the Permittee to identify properties (tax parcels) that are authorized to receive biosolids and/or industrial residuals, and each of the legal landowners of those tax parcels. A Land Application Agreement-Biosolids and Industrial Residuals from original signature must be attached for each legal landowner identified below prior to land application at the identified parcels.

Permittee: Recyc Systems, Inc.

Site Name: Mark L. Palmer

County or City: Lunenburg Co.

Please Print

Signature not required on this page

<u>Tax Parcel ID(s)</u>	<u>Landowners (s)</u>
TM40(A),P1	Francis R. Palmer
TM40(A),P2	Mark L. Palmer
TM28(A),P41,43	Mark L. Palmer
TM28(A),P41A,42	Mark L. or Sue W. Palmer

MARK L PALMER SITE

LUNENBURG

PROPERTY OWNERS LIST

OWNER

PARCEL

MARK L PALMER

TM40(A),P2

2205 BRAXTON ROAD

TM28(A),P41A,42

DRAKES BRANCH, VA 23937

434-568-0288

FRANCIS R PALMER

TM40(A),P1

2500 KENT FORD ROAD

MIDLOTHIAN, VA 23113

804-794-6840

SUE W. PALMER

TM28(A),P41A,42

2973 BRAXTON ROAD

DRAKES BRANCH, VA 23937

434-547-0046

FARM DATA SHEET

SITE NAME:	Mark L. Palmer Site	COUNTY:	Lunenburg
OWNER:	See Attached	OPERATOR:	Mark L. Palmer
OWNERS		OPERATOR'S	2205 Braxton Road
ADDRESS		ADDRESS	Drakes Branch, VA 23937
OWNERS		OPERATOR'S	
TELEPHONE		TELEPHONE	
GENERAL FARM		CELL PHONE:	434-568-0288
TYPE:	Hay/Pasture		
# CATTLE:	100	EMAIL:	
LAGOON or SLURRY	None	LATITUDE:	36° 57'08"
TOPO QUAD:	Fort Mitchell	LONGITUDE:	78° 26'47"
COMMENTS:			

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RECYC SYSTEMS, INC

FIELD DATA SHEET

Field Identification	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
		Water Table	Bed Rock/Shallow	Surf/Leach	Freq Flood			
LUMLP 1	9.0	10B(Jan-Apr)	-	-	-	CM01	TM40(A),P1	T2444 Fields 2,4
LUMLP 2	17.6	12B(Dec-Apr)	-	-	-	CM01	TM40(A),P1	T2444 Fields
LUMLP 3	10.2	10B(Jan-Apr) 12B(Dec-Apr) 24B(Nov-Apr)	-	-	-	CM01	TM40(A),P1	T2444 Field 2
LUMLP 4	40.1	10B(Jan-Apr) 12B(Dec-Apr) 12C2(Dec-Apr) 24B(Nov-Apr)	-	-	-	CM01	TM40(A),P2	T16151 Fields 0,18
LUMLP 5	12.4	12C2(Dec-Apr)	-	-	-	CM01	TM40(A),P2	T16151 Fields
LUMLP 6	19.1	12B(Dec-Apr) 12C2(Dec-Apr) 18B(Dec-May)	-	-	-	CM01	TM40(A),P2	T16151 Fields 12- 16,19,20

RECYC SYSTEMS, INC

FIELD DATA SHEET

Field Identification	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
		Water Table	Bed Rock/Shallow	Surf/Leach	Freq Flood			
LUMLP 7	13.7	-	9D	-	-	CM01	TM40(A),P2	T16151 Fields 2,17
LUMLP 8	13.6	12B(Dec-Apr)	21D2	-	-	CM01	TM40(A),P2	T16151 Field 17
LUMLP 9	17.6	12B(Dec-Apr)	21D2	-	-	CM01	TM40(A),P2	T16151 Field 29
LUMLP 10	23.0	12C2(Dec-Apr) 13B(Dec-May)	21D2	-	-	CM01	TM40(A),P2	T16151 Fields 11,24
LUMLP 11	7.0	-	-	-	-	CM01	TM40(A),P2	T16151 Field 32
LUMLP 12	7.8	10C2(Jan-Apr)	-	-	-	CM01	TM28(A),P41	T2640 Field 12
TOTAL ACRES IN SITE	191.1							

Report Number: 12-156-0510

Account Number: 70594

Rate



www.aleastern.com

A&L Eastern Laboratories

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: RECYC SYSTEMS INC
SUSAN TRUMBO
8455 WHITESHOP RD
CULPEPER VA 22701

Grower:
PALMER/LUMLP
LUNENBURG

Submitted By: J B CRENSHAW
Farm ID:

SOIL ANALYSIS REPORT

Analytical Method(s):
Mehlich 3

Date Received: 06/04/2012

Date Of Analysis: 06/05/2012

Date Of Report: 06/06/2012

Sample ID Field ID	Lab Number	Organic Matter			Phosphorus			Potassium		Magnesium		Calcium		Sodium		pH		Acidity	C.E.C
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Rate	Reserve ppm	K ppm	Rate	Mg ppm	Rate	Ca ppm	Rate	Na ppm	Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
1	03563	1.5	L 7	77	25	L		28	VL	63	H	236	L			5.5	6.87	0.6	2.4
2	03564	1.3	L 7	71	22	L		38	VL	109	H	335	M			5.9	6.87	0.6	3.2
3	03565	1.8	L 8	82	44	M	M	20	VL	56	H	224	L			5.2	6.85	0.8	2.5
4A	03566	1.8	L 8	81	38	M	M	37	VL	85	H	334	L			5.3	6.82	1.1	3.6
4B	03567	1.9	L 8	84	35	M	M	33	VL	79	H	303	M			5.5	6.85	0.8	3.0

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	SS ms/cm	Cl ppm	Al ppm
1	3.0	21.9	49.2		25.7										
2	3.0	28.4	52.3		17.3										
3	2.1	18.7	44.8		33.9										
4A	2.6	19.7	46.4		30.9										
4B	2.6	21.9	50.5		26.1										

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: A&L Eastern Laboratories, Inc.

by: *Paucic McGroary*

Paucic McGroary

Report Number: 12-156-0510

Account Number: 70594



www.aleastern.com

A&L Eastern Laboratories

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: RECYC SYSTEMS INC
SUSAN TRUMBO
8455 WHITESHOP RD
CULPEPER VA 22701

Grower:
PALMER/LUMLP
LUNENBURG

Submitted By: J B CRENSHAW
Farm ID:

Date Received: 06/04/2012

Date Of Report: 06/06/2012

SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
1	Adjust pH to 6.8	0	1.8				17						
2	Adjust pH to 6.8	0	1.5				0						
3	Adjust pH to 6.8	0	1.8				24						
4A	Adjust pH to 6.8	0	1.8				0						
4B	Adjust pH to 6.8	0	1.8				1						

Comments:

Sample(s) 1, 3, 4B:

If dolomitic lime is not used, apply required magnesium with magnesium oxide. Epsom Salts, K-Mag or Sul-PO-Mag.

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Paulie McGroary

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Farm ID:

SOIL ANALYSIS REPORT

Analytical Method(s):
Mehlich 3

Date Received: 06/04/2012

Date Of Analysis: 06/05/2012

Date Of Report: 06/06/2012

Sample ID Field ID	Lab Number	Organic Matter			Phosphorus				Potassium		Magnesium		Calcium		Sodium		pH		Acidity	C.E.C
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Rate	Reserve ppm	Rate	K ppm	Rate	Mg ppm	Rate	Ca ppm	Rate	Na ppm	Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
5	03568	2.7	M 9	98	20	L			26	VL	90	H	436	M			5.4	6.81	1.2	4.2
6	03569	2.8	M 9	97	18	L			142	H	185	H	692	M			6.3	6.87	0.6	6.0
7	03570	2.4	L 9	93	22	L			65	L	73	H	303	L			5.2	6.81	1.2	3.5
8	03571	2.6	M 9	95	16	L			174	VH	103	H	422	L			5.5	6.81	1.2	4.6
9	03572	3.5	M 11	111	12	VL			158	H	125	H	757	M			6.0	6.83	1.0	6.2

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	SS ms/cm	Cl ppm	Al ppm
5	1.6	17.9	51.9		28.2										
6	6.1	25.7	57.7		10.6										
7	4.8	17.4	43.3		33.9										
8	9.7	18.7	45.9		25.8										
9	6.5	16.8	61.0		15.4										

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: A&L Eastern Laboratories, Inc.

by: *Paucic McGroary*

Paucic McGroary

Report Number: 12-156-0510

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Submitted By: J B CRENSHAW
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Date Received: 06/04/2012

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Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
5	Adjust pH to 6.8	0	1.8				0						
6	Adjust pH to 6.8	0	1.0				0						
7	Adjust pH to 6.8	0	1.8				7						
8	Adjust pH to 6.8	0	1.8				0						
9	Adjust pH to 6.8	0	1.3				0						

Comments:

Sample(s) 7:

If dolomitic lime is not used, apply required magnesium with magnesium oxide. Epsom Salts, K-Mag or Sul-PO-Mag.

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Pauric McGeary

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Submitted By: J B CRENSHAW
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SOIL ANALYSIS REPORT

Analytical Method(s):

Mehlich 3

Date Received: 06/04/2012

Date Of Analysis: 06/05/2012

Date Of Report: 06/06/2012

Sample ID Field ID	Lab Number	Organic Matter			Phosphorus				Potassium		Magnesium		Calcium		Sodium		pH		Acidity	C.E.C
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Rate	Reserve ppm	Rate	K ppm	Rate	Mg ppm	Rate	Ca ppm	Rate	Na ppm	Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
10	03573	2.2	L 8	89	66 H	H		38	VL	78	H	291	L			5.1	6.80	1.3	3.5	
11	03574	2.8	M 9	99	13 V	VL		129	H	123	H	617	M			6.1	6.86	0.7	5.1	
12	03575	1.4	L 7	72	45 M	M		75	M	97	H	340	L			5.2	6.79	1.4	4.1	

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	SS ms/cm	Cl ppm	Al ppm
10	2.8	18.6	41.6		37.9										
11	6.5	20.1	60.5		13.8										
12	4.7	19.7	41.5		34.1										

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: A&L Eastern Laboratories, Inc.

by: *Paucic McGeary*

Paucic McGeary

Report Number: 12-156-0510

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Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
10	Adjust pH to 6.8	0	2.0				2						
11	Adjust pH to 6.8	0	1.3				0						
12	Adjust pH to 6.8	0	2.0				0						

Comments:

Sample(s) 10:

If dolomitic lime is not used, apply required magnesium with magnesium oxide. Epsom Salts, K-Mag or Sul-PO-Mag.

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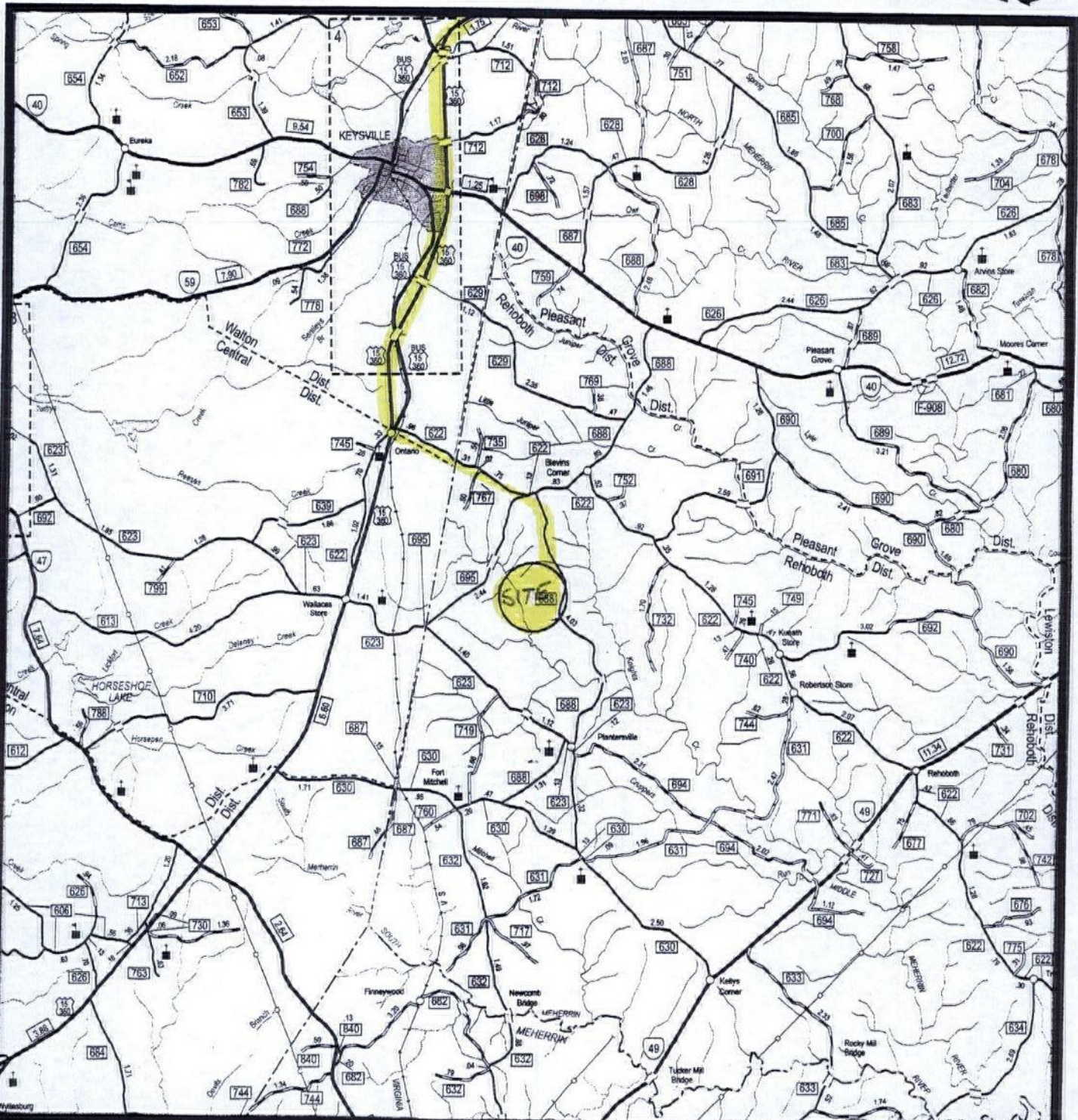
Paucic McGeary

Paucic McGeary

MAPS

Recyc Systems™ Inc.

(Biosolids Land Application)



Scale: 1 inch = 2 miles

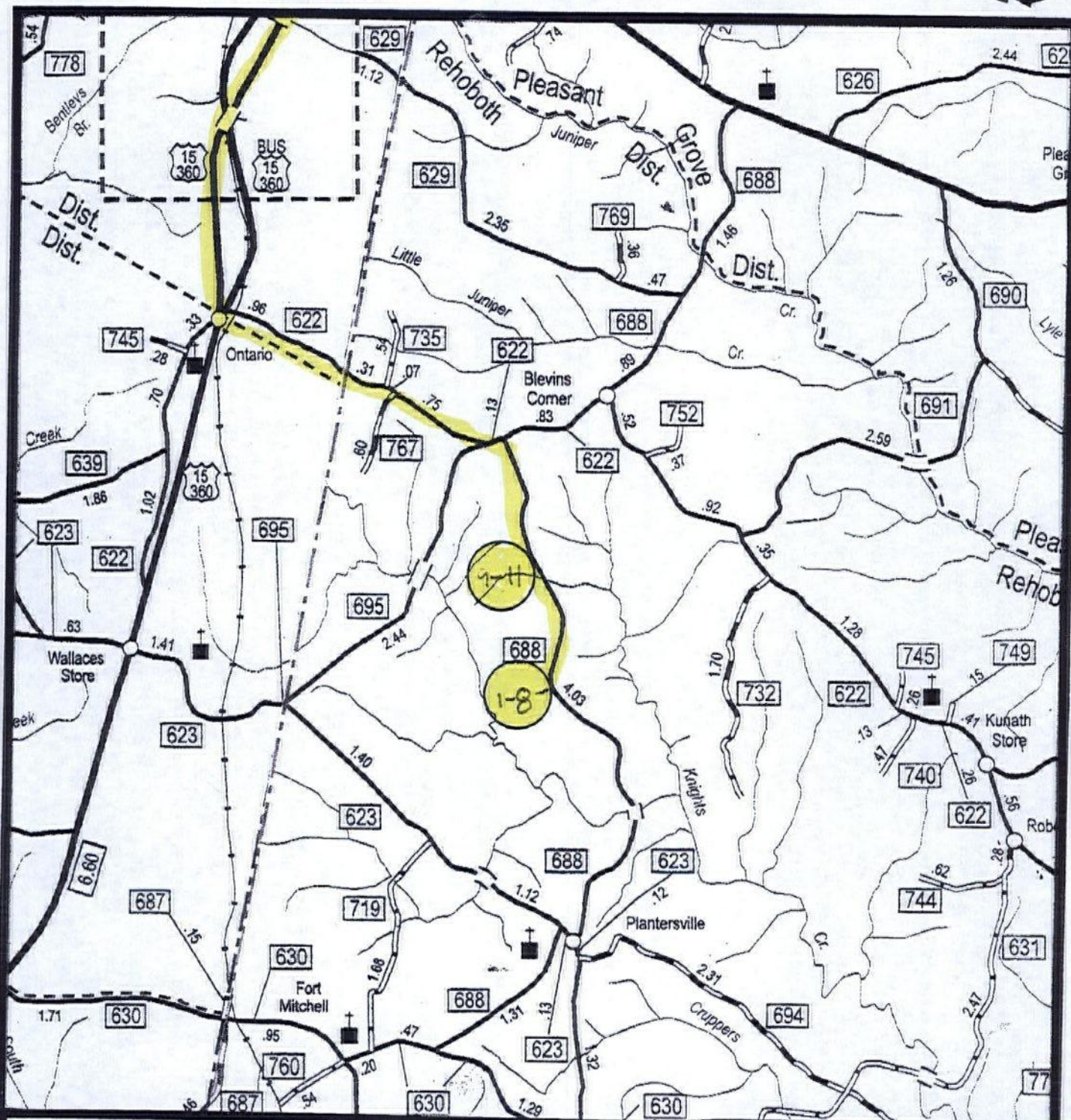
LUMLP 1-12

VICINITY MAP



Inc.

(Biosolids Land Application)



Scale: 1 inch = 1 mile

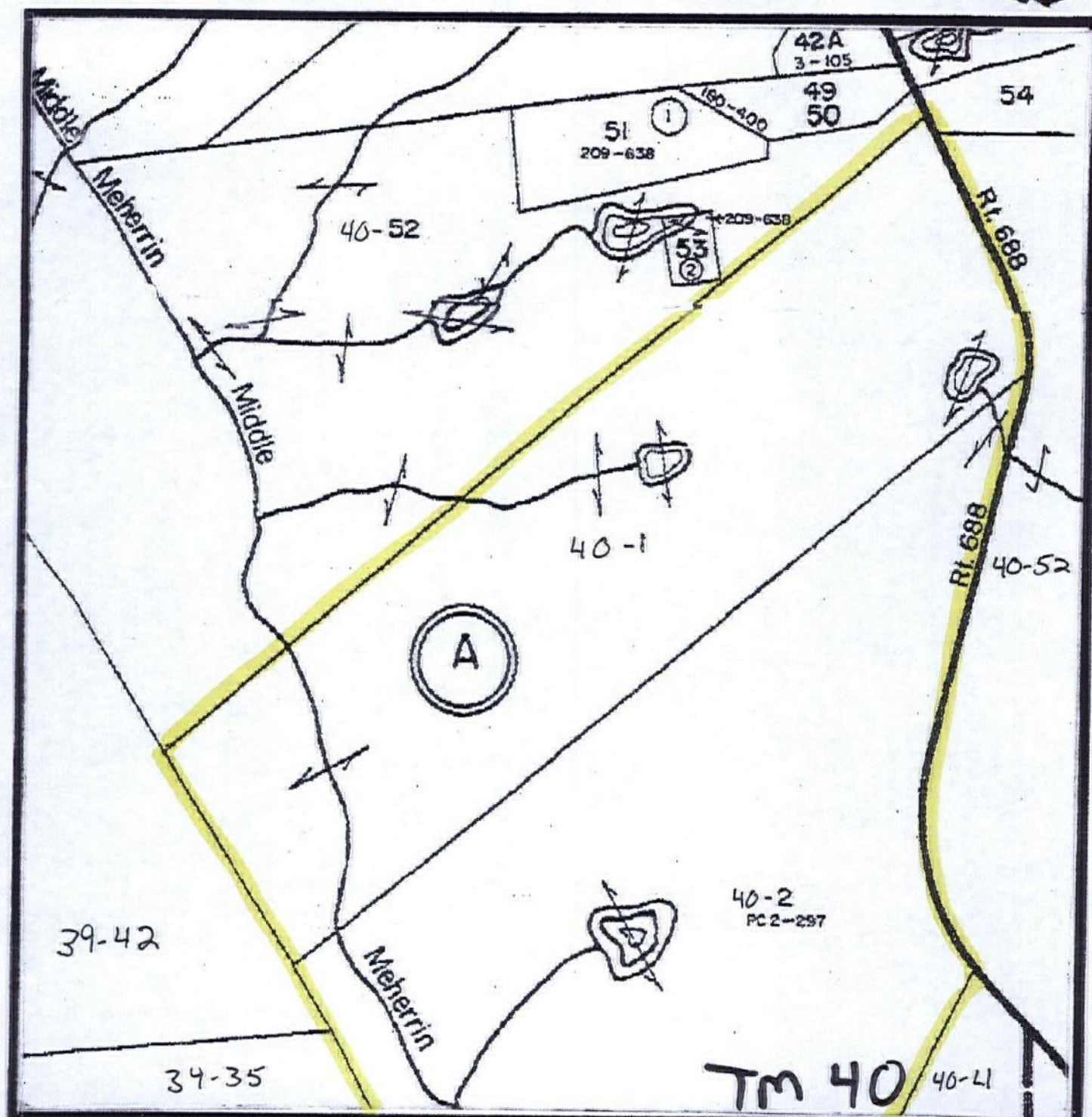
LUMLP 1-12

VICINITY MAP



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale: 1 inch = 660 feet

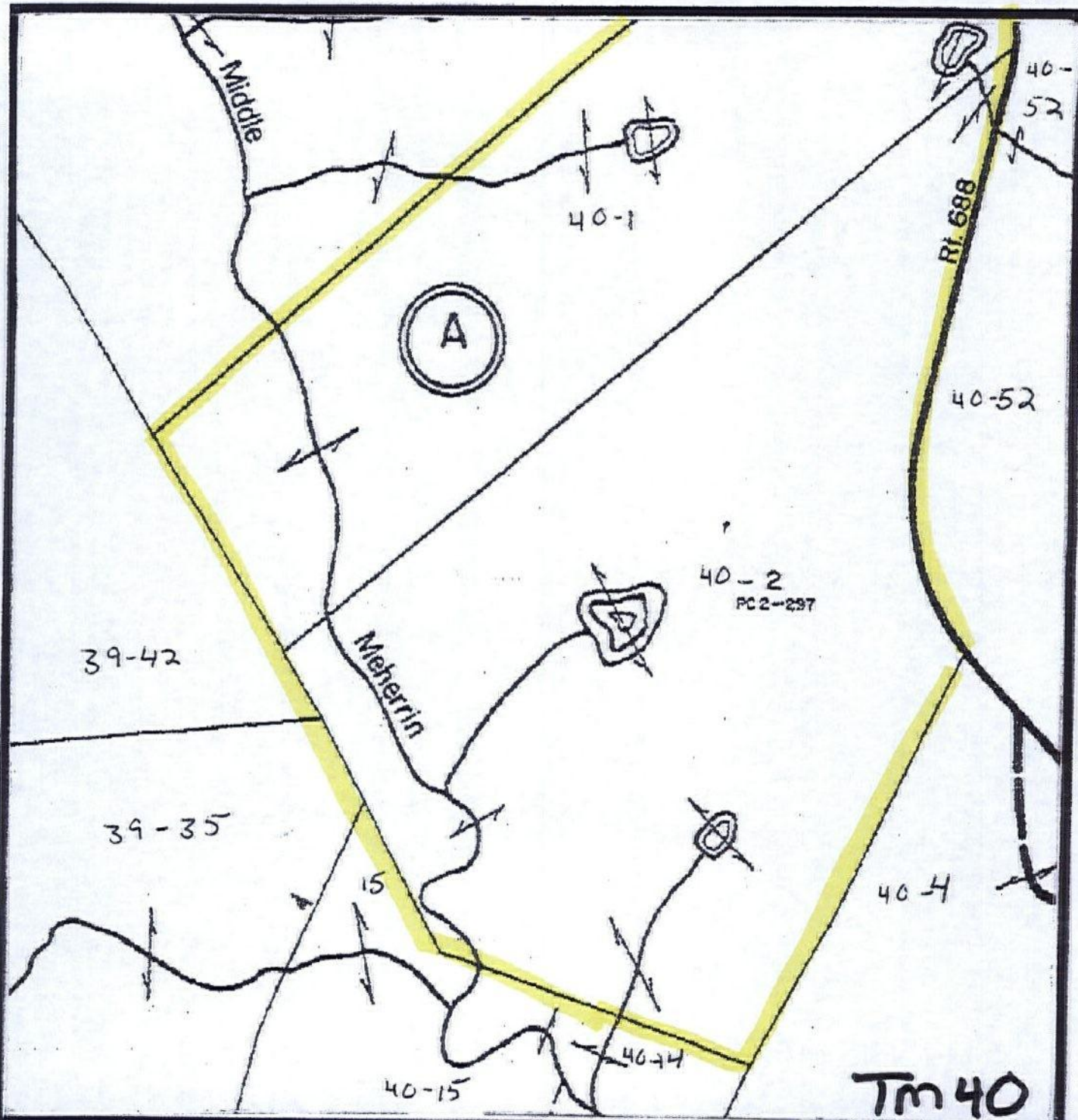
LUMLP 1-3

TAX MAP



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale: 1 inch = 660 feet

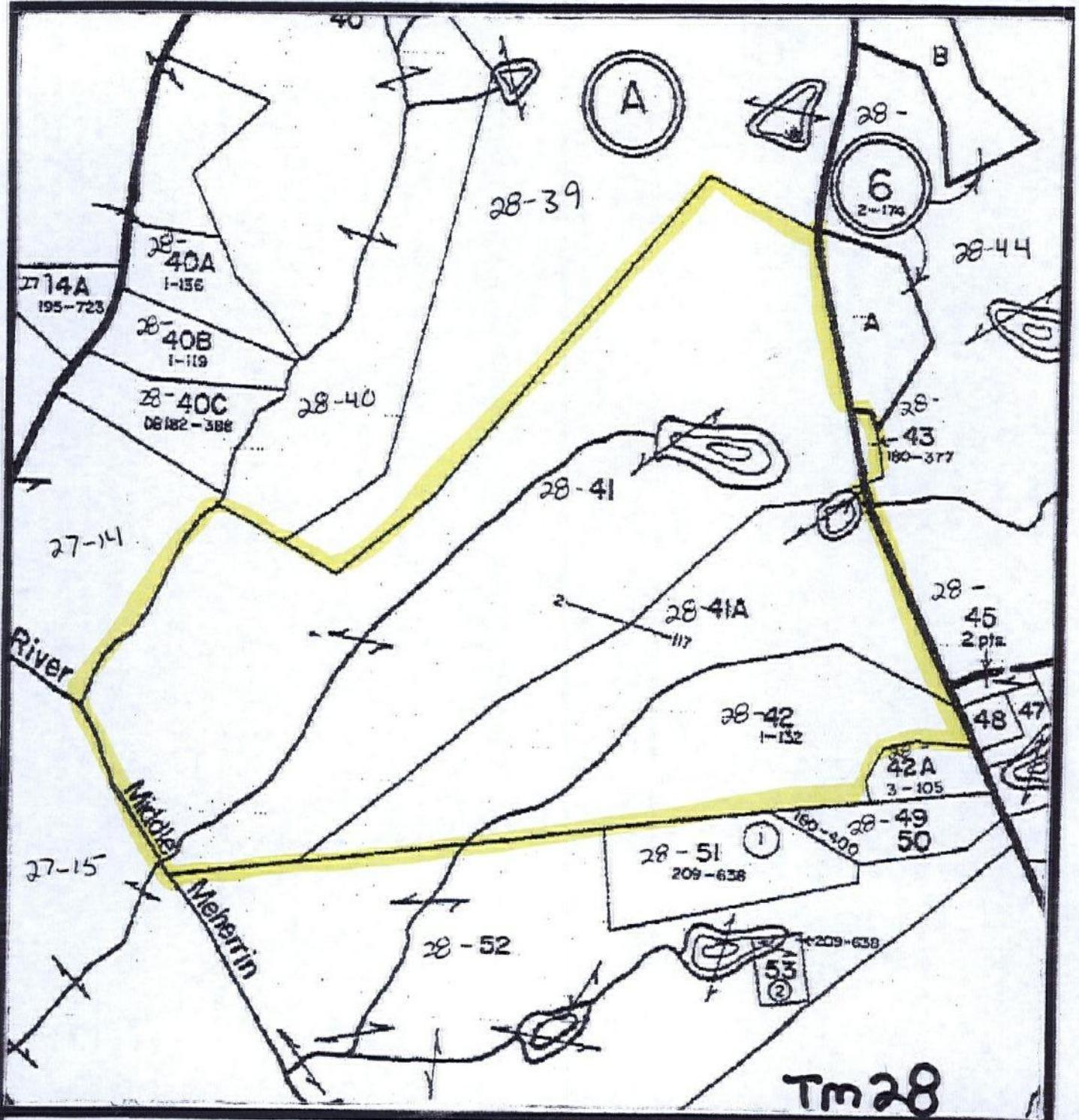
LUMLP 4-11

TAX MAP



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale:

1 inch = 660 feet

LUMLP 12

TAX MAP



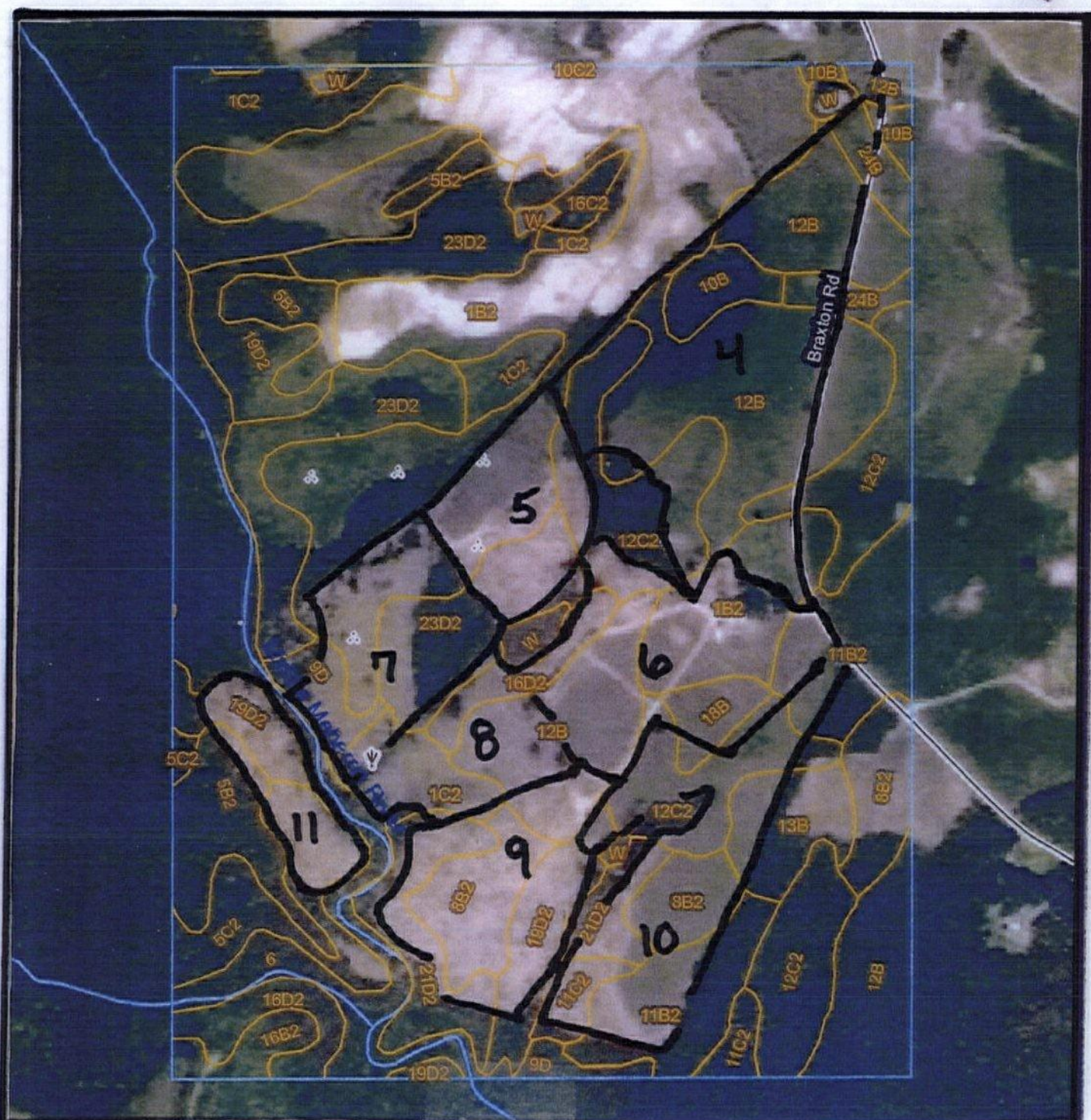
ADJOINING LANDOWNERS

Mark L. Palmer

LUNENBURG COUNTY

Tax Map	Parcel #	Owner Name(s)
27A	14	Richard E. Wallace
	15	Robert L. & Alma P. Gianniny
28A	39	Malcolm Bailey
	40	Kenneth Richard Palmer
	42A	Sue W. Palmer
	44	Connie P. & Kenneth R. Palmer
	45	William D. Amos
	48	Bobbie L. or Betty A. Motley
	49	Lucille F. Amos Living Trust
	50	Lucille F. Amos Living Trust
	51	C. Trent or Roxie A. Johnson
	52	Ruth G. Amos & C. Trent or Roxie A. Johnson
39A	35	Frances E. Miller
	42	REW Land LLC
40A	1	Francis Ray Palmer
	4	Edward M. Jones, Jr.
	14	Kathleen Bouldin
	15	Mabel C. Wilson
	52	Malcolm L. or Betty B. Bailey





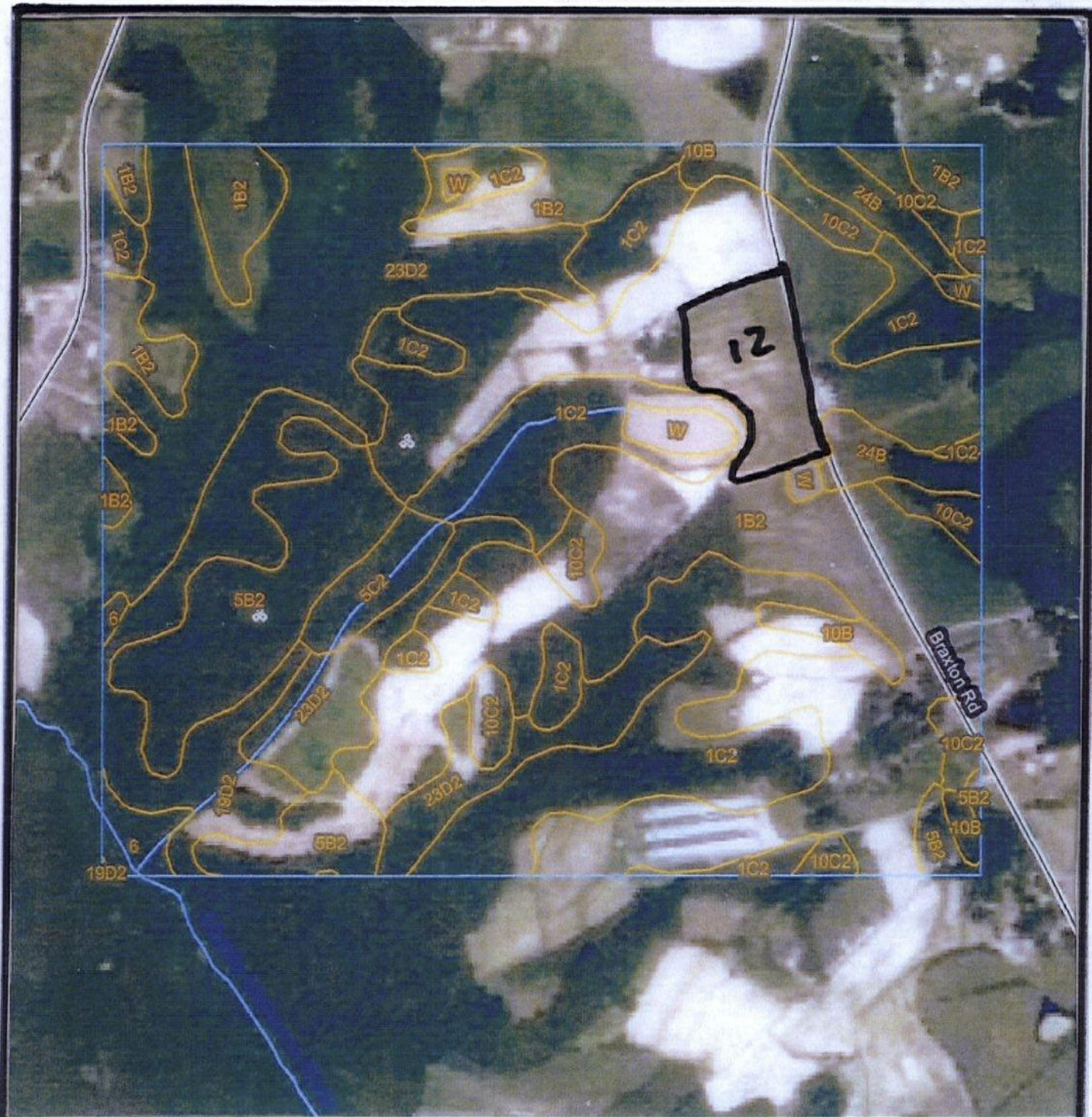
Scale:

1 inch = 660 feet

LUMLP 4-11

SOIL MAP



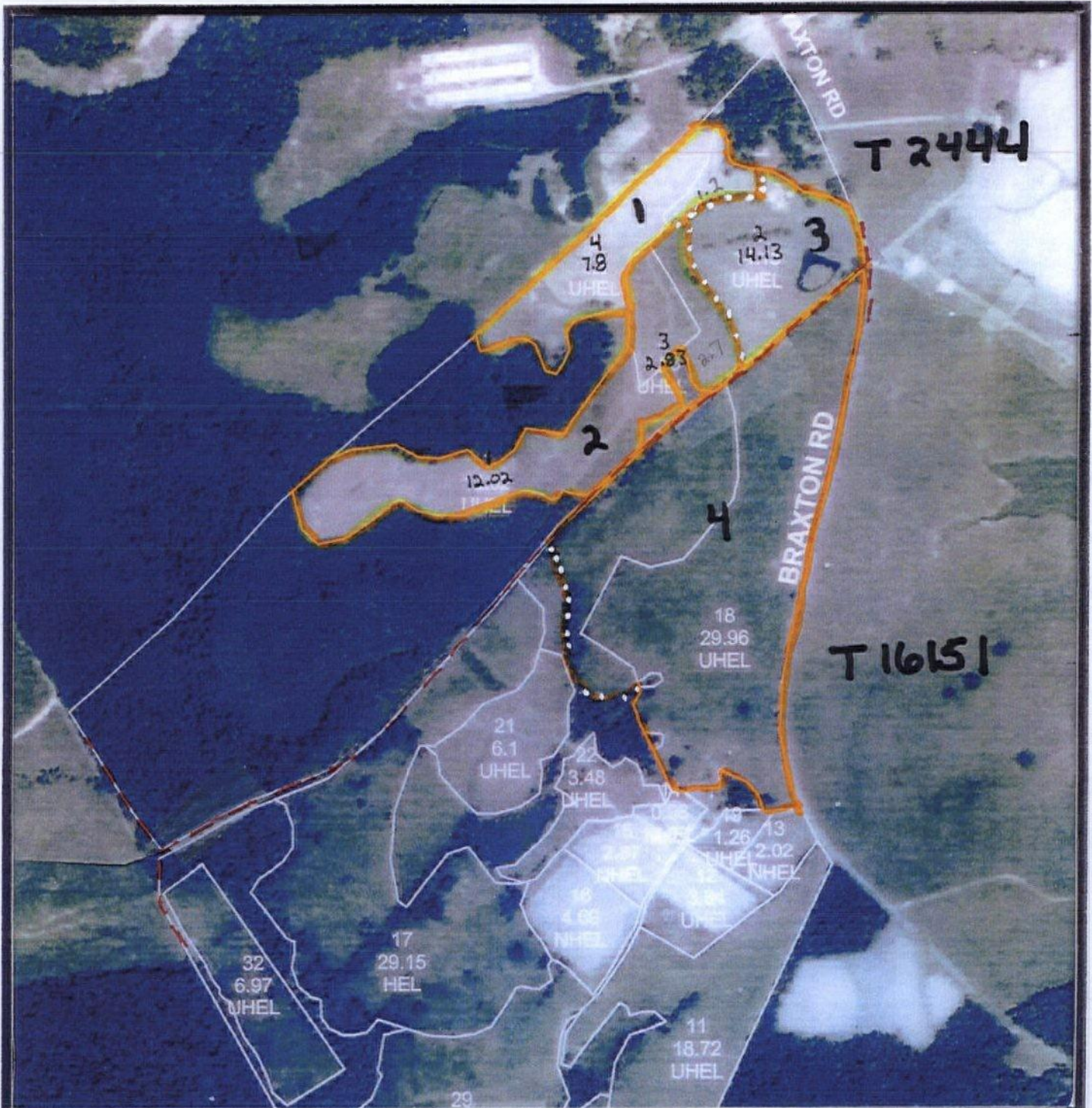


Scale: 1 inch = 660 feet

LUMLP 12

SOIL MAP



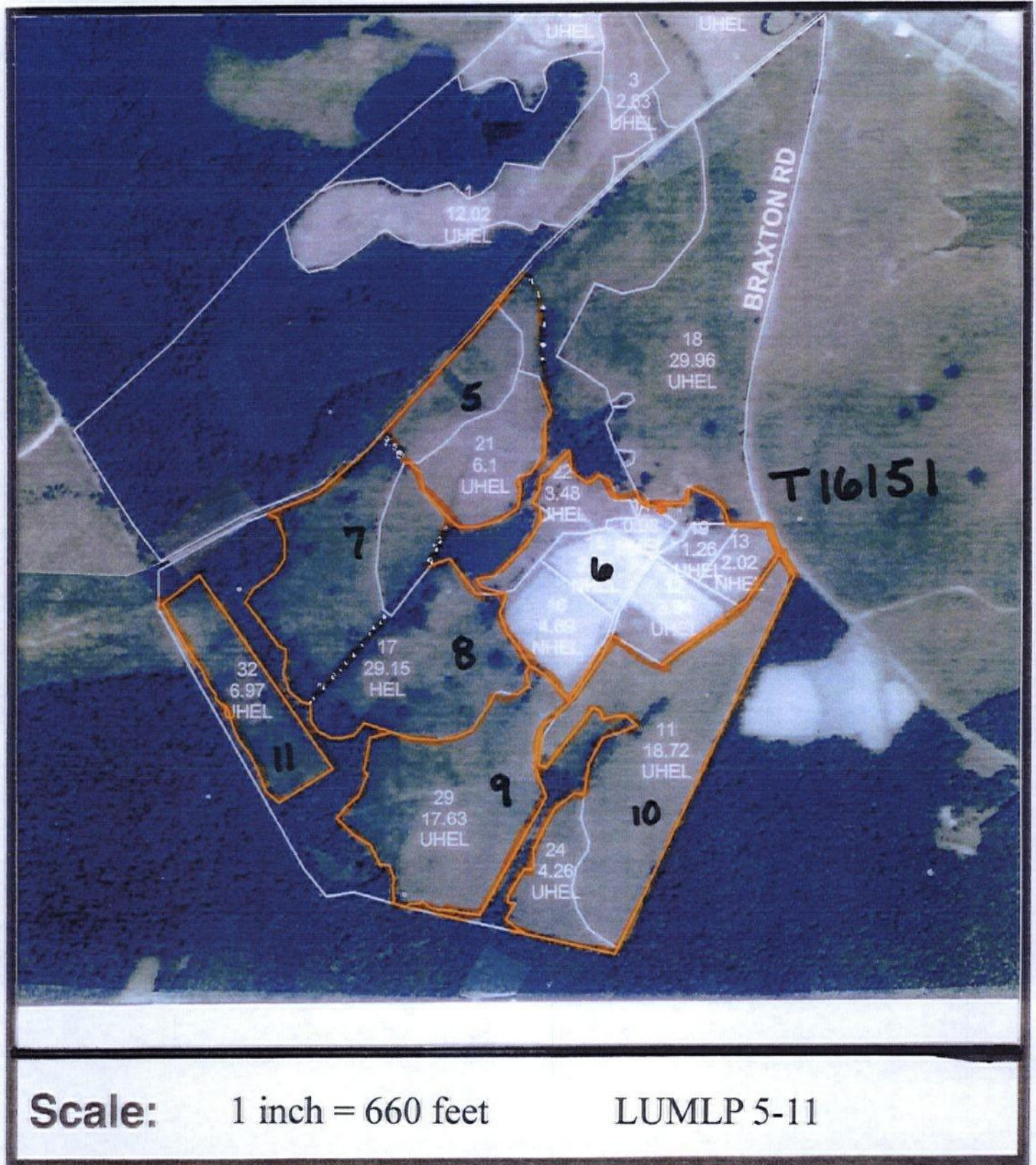


Scale: 1 inch = 660 feet

LUMLP 1-4

AERIAL MAP





Recyc SystemsTM Inc.

(Biosolids Land Application)



T 2640

Scale: 1 inch = 660 feet

LUMLP 12

AERIAL MAP



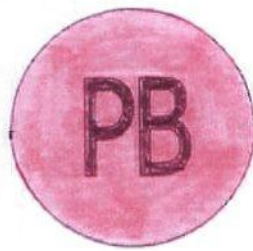
Legend for Site Plan



House and Well



Well / Spring



Perennial Streams & Surface



Wet Spot



Intermittent Stream / Drainage



Trees and Woods



Private Drive



Rock / Rocky Area



Sinkhole



Severely Eroded Spot



State Road



Field Boundary / Fence



Property Line

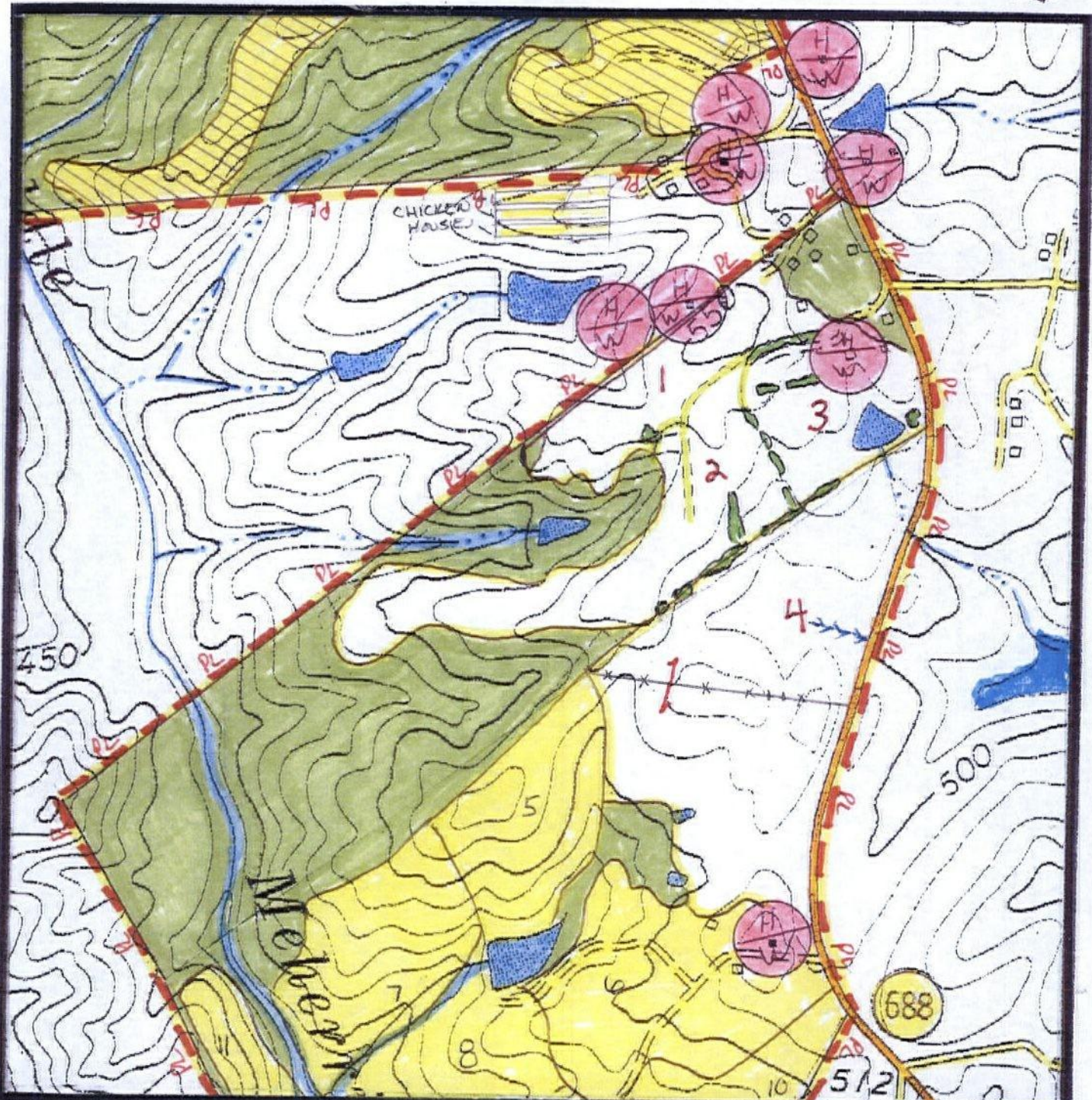


Slope



Recyc SystemsTM Inc.

(Biosolids Land Application)

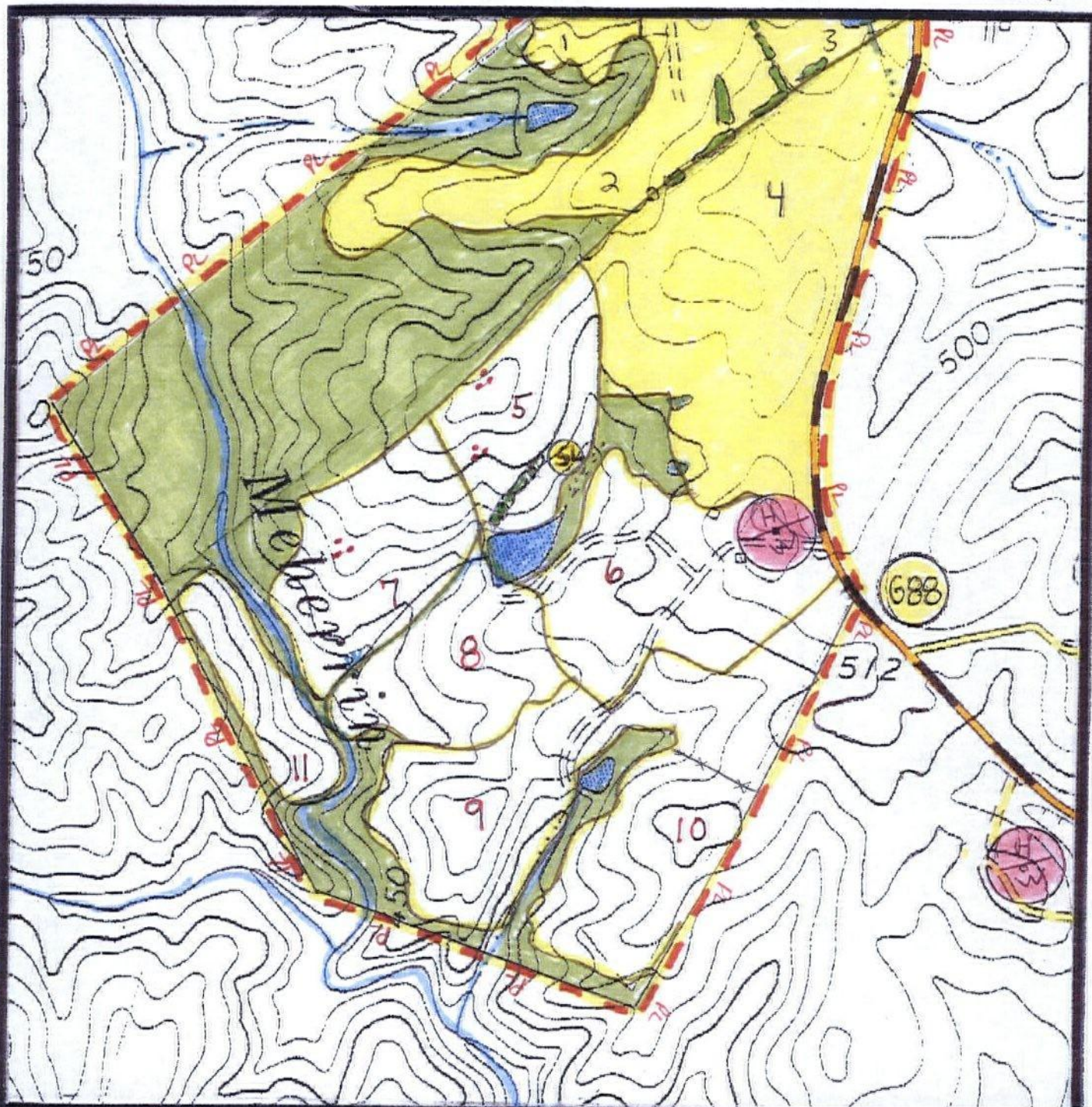


Scale: 1 inch = 660 feet

LUMLP 1-4

SITE PLAN



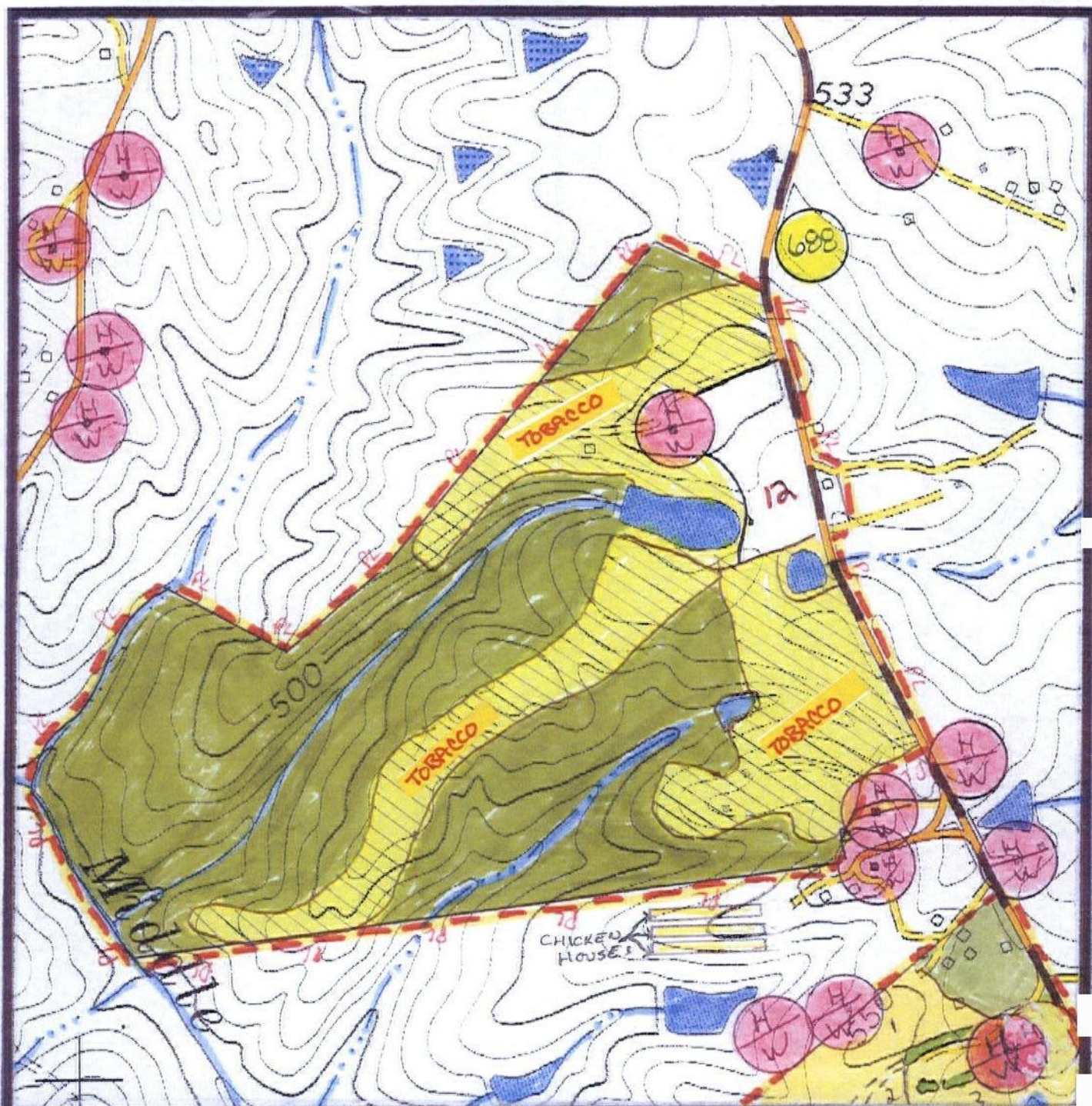


Scale: 1 inch = 660 feet

LUMLP 5-11

SITE PLAN

N
A



Scale: 1 inch = 660 feet

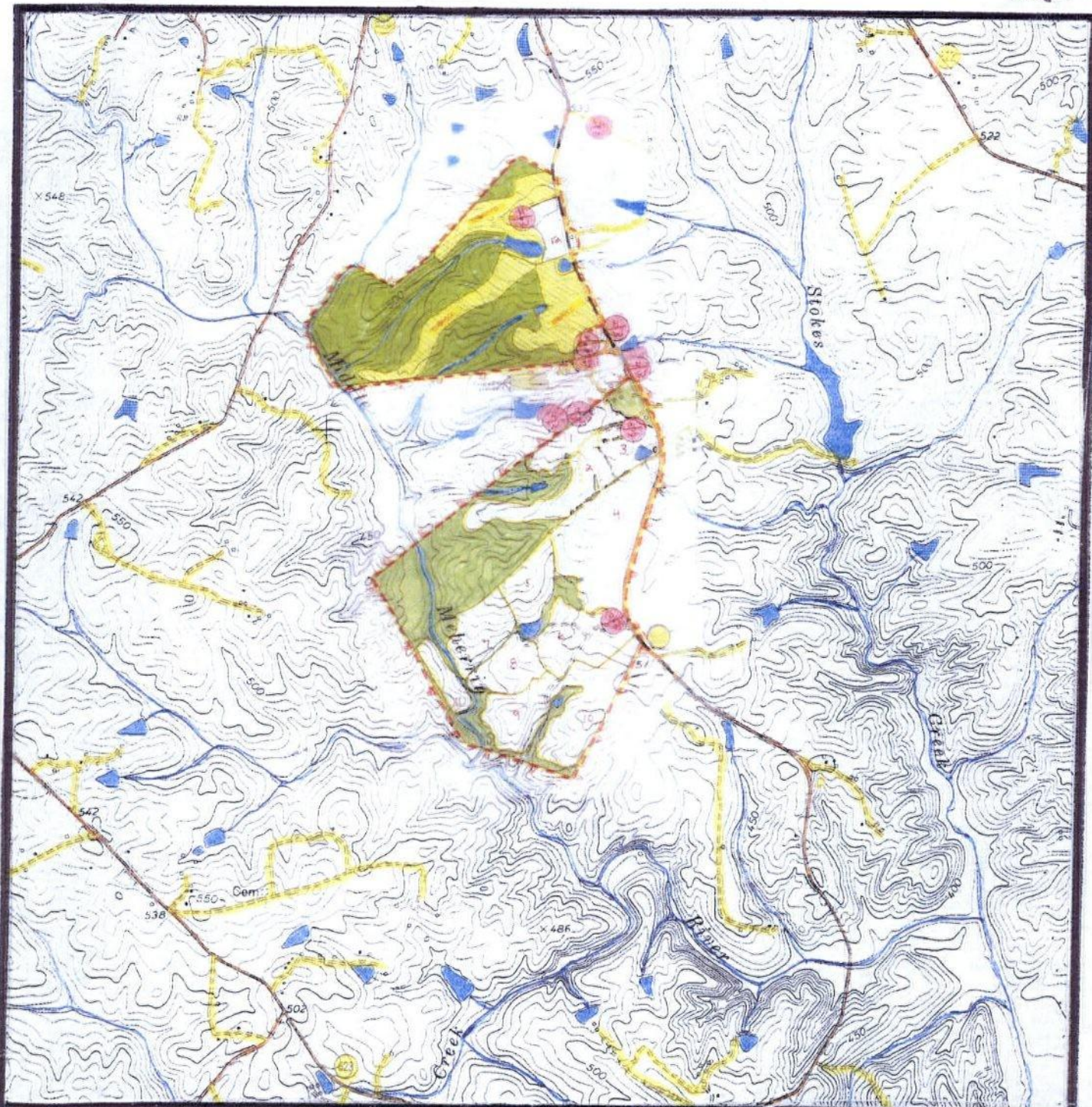
LUMLP 12

SITE PLAN



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale:

1 inch = 2,000 feet

LUMLP 1-12

TOPOGRAPHIC MAP

